

Fig. 1

Fig. 2

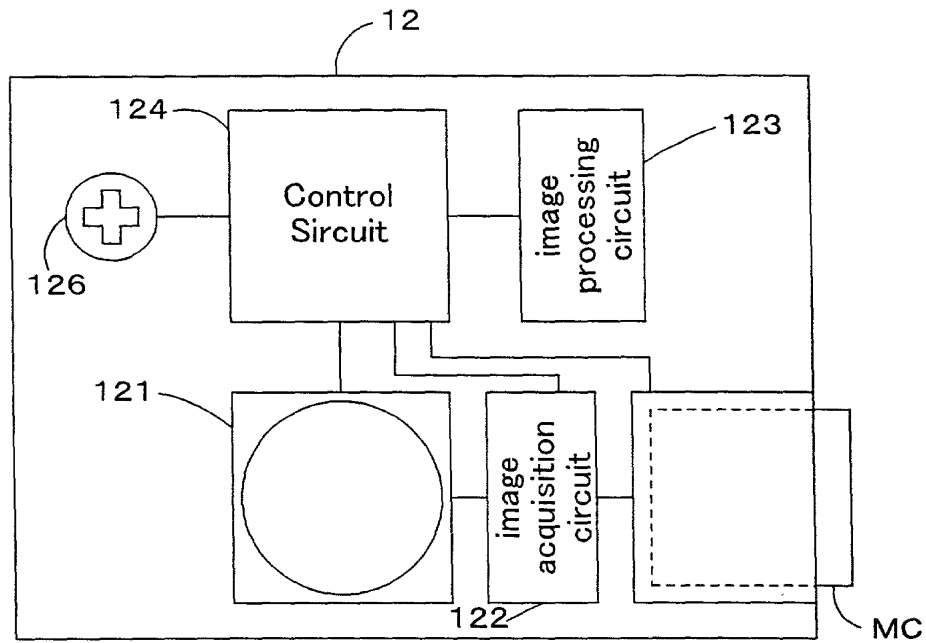


Fig. 3

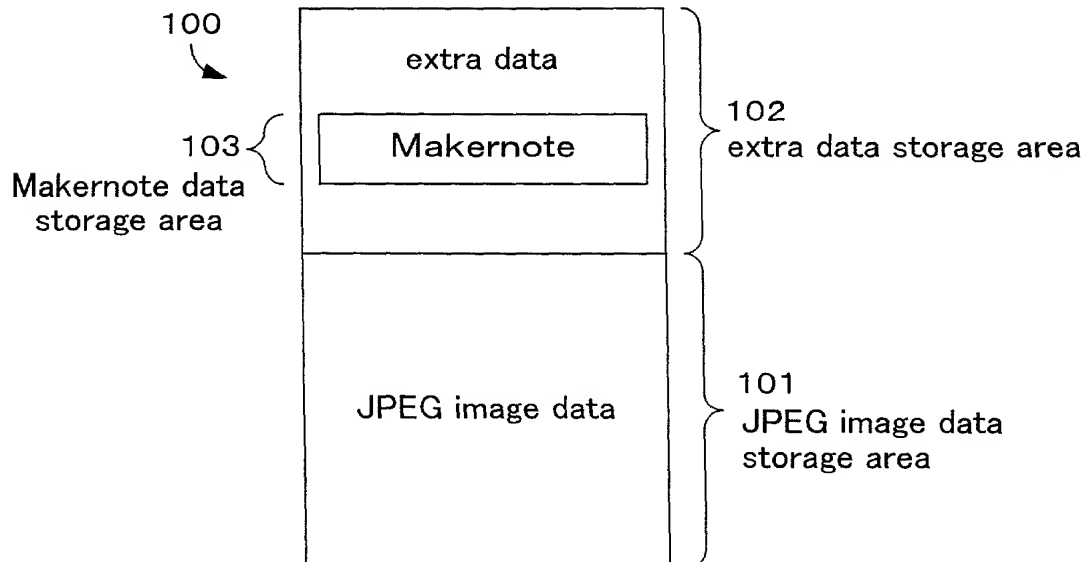


Fig. 4

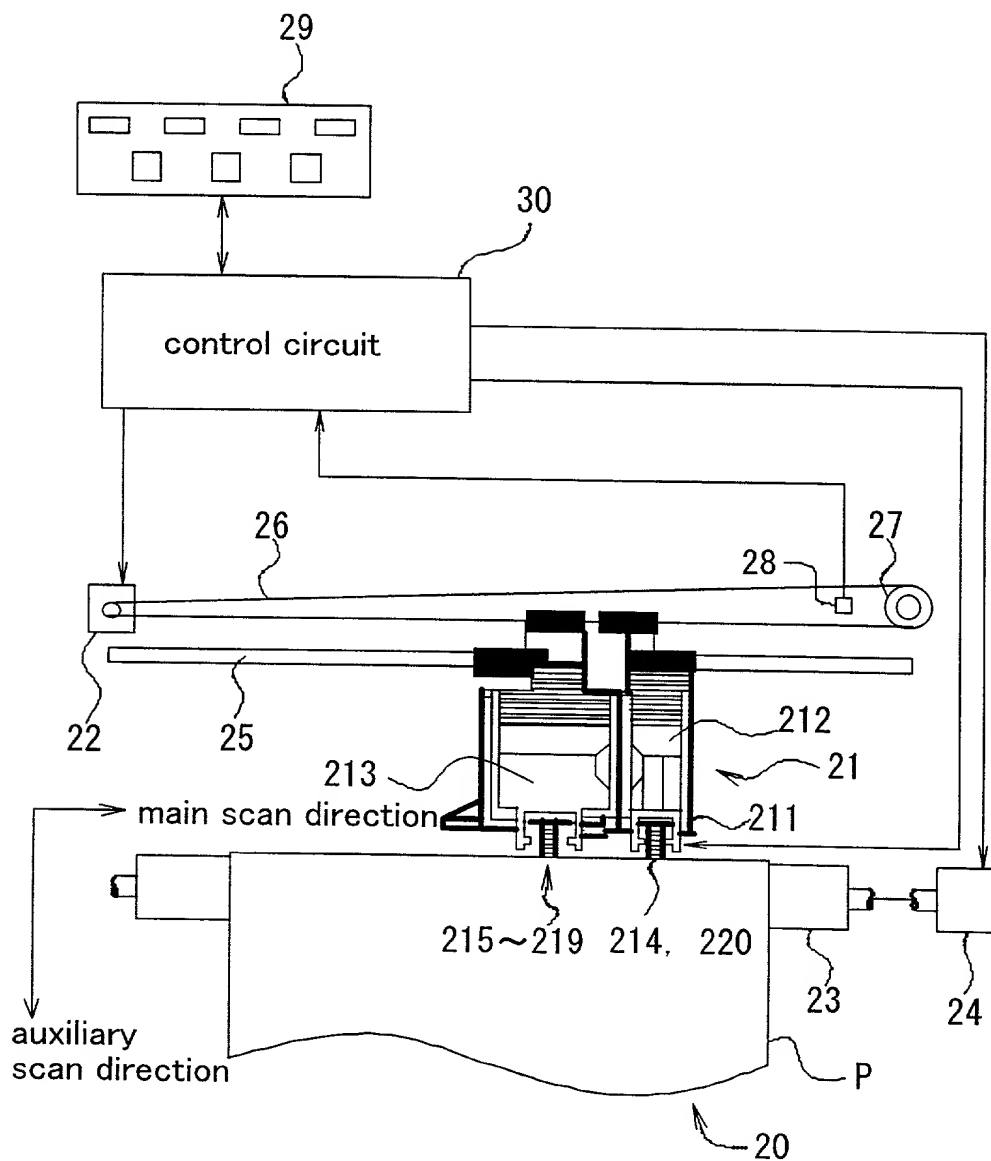


Fig. 5

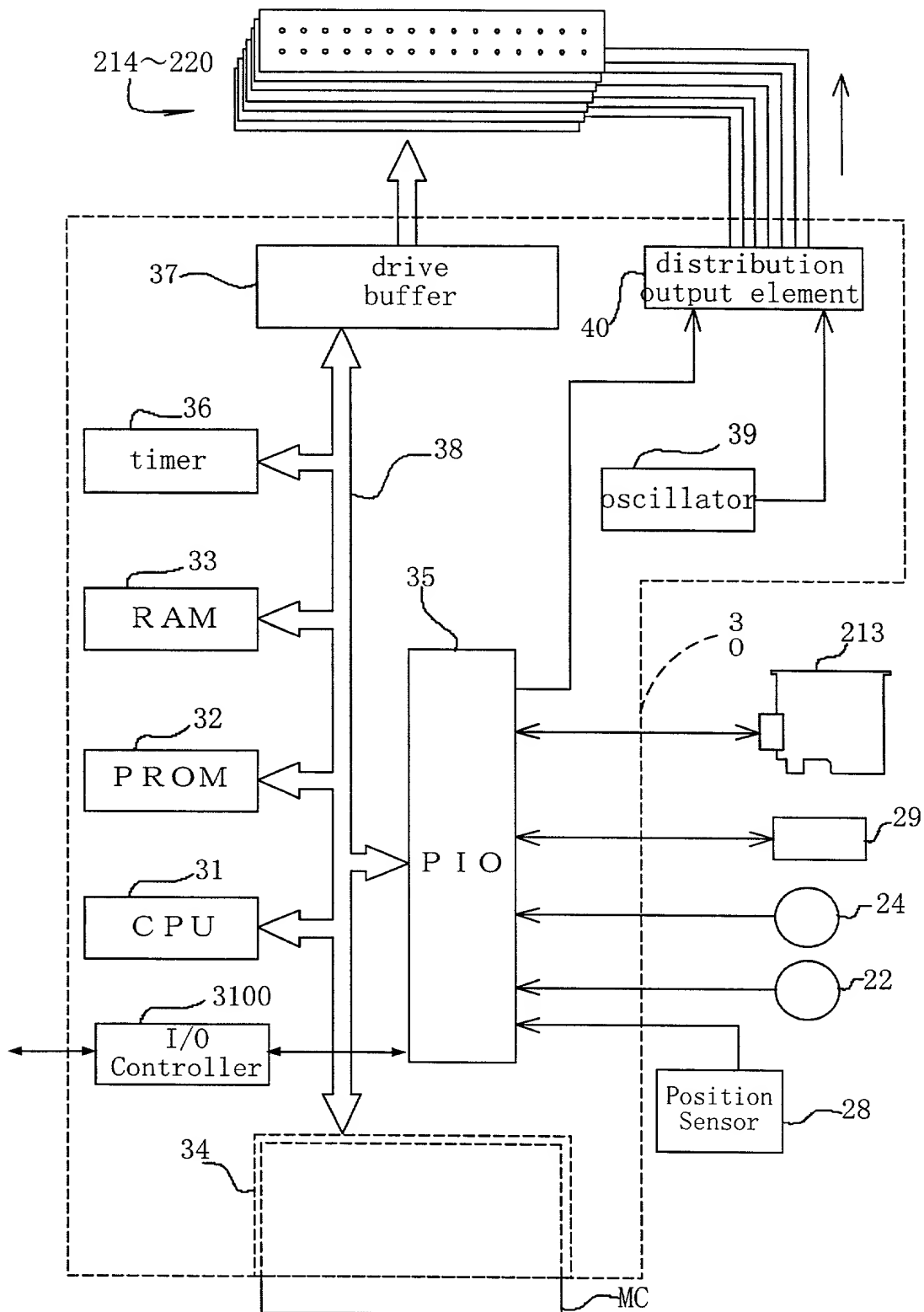


Fig.6

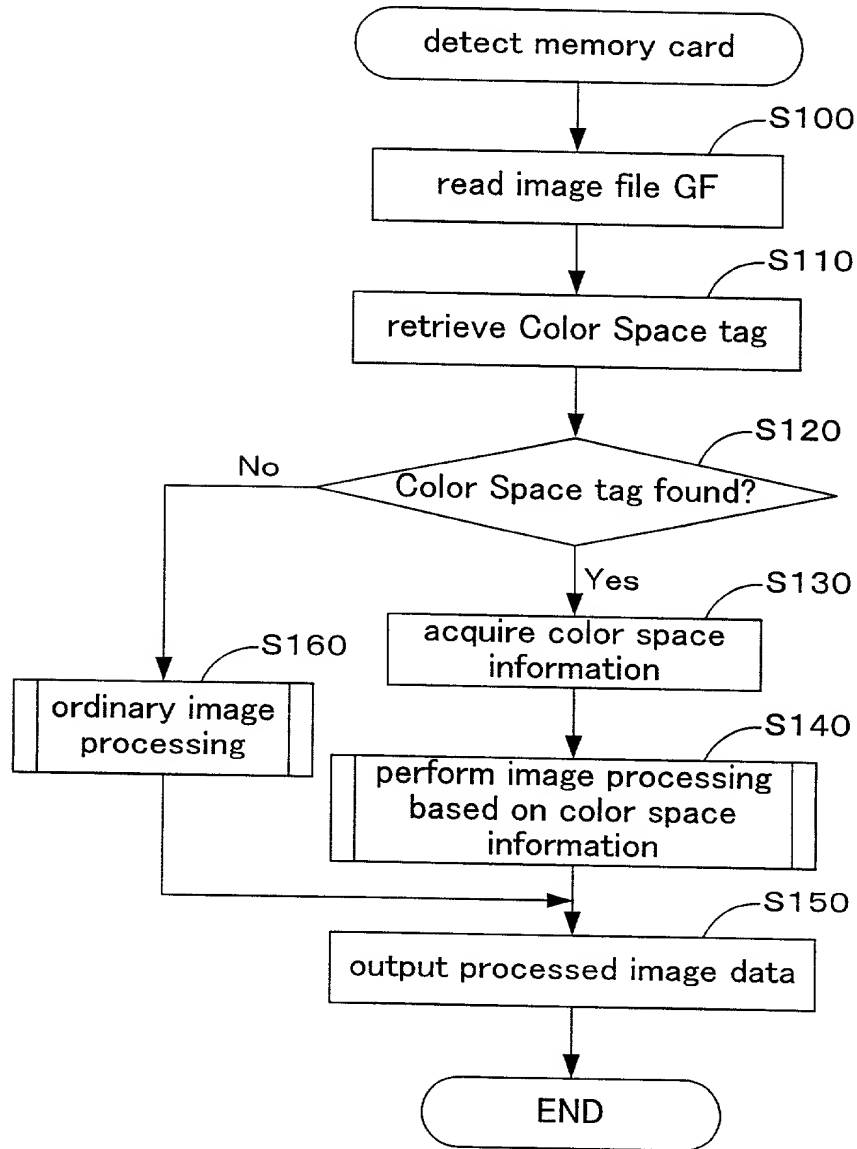
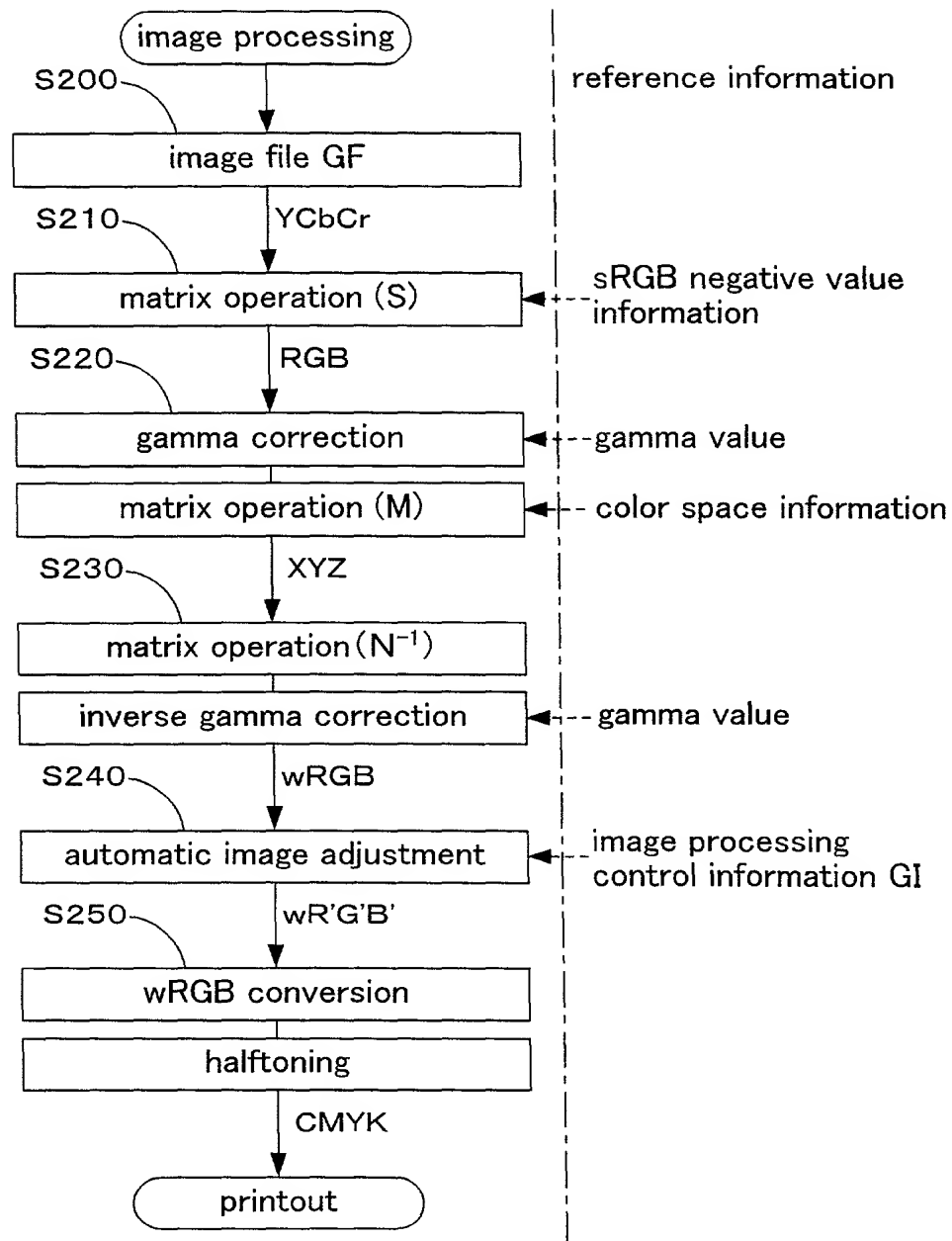


Fig. 7



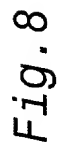


Fig. 9

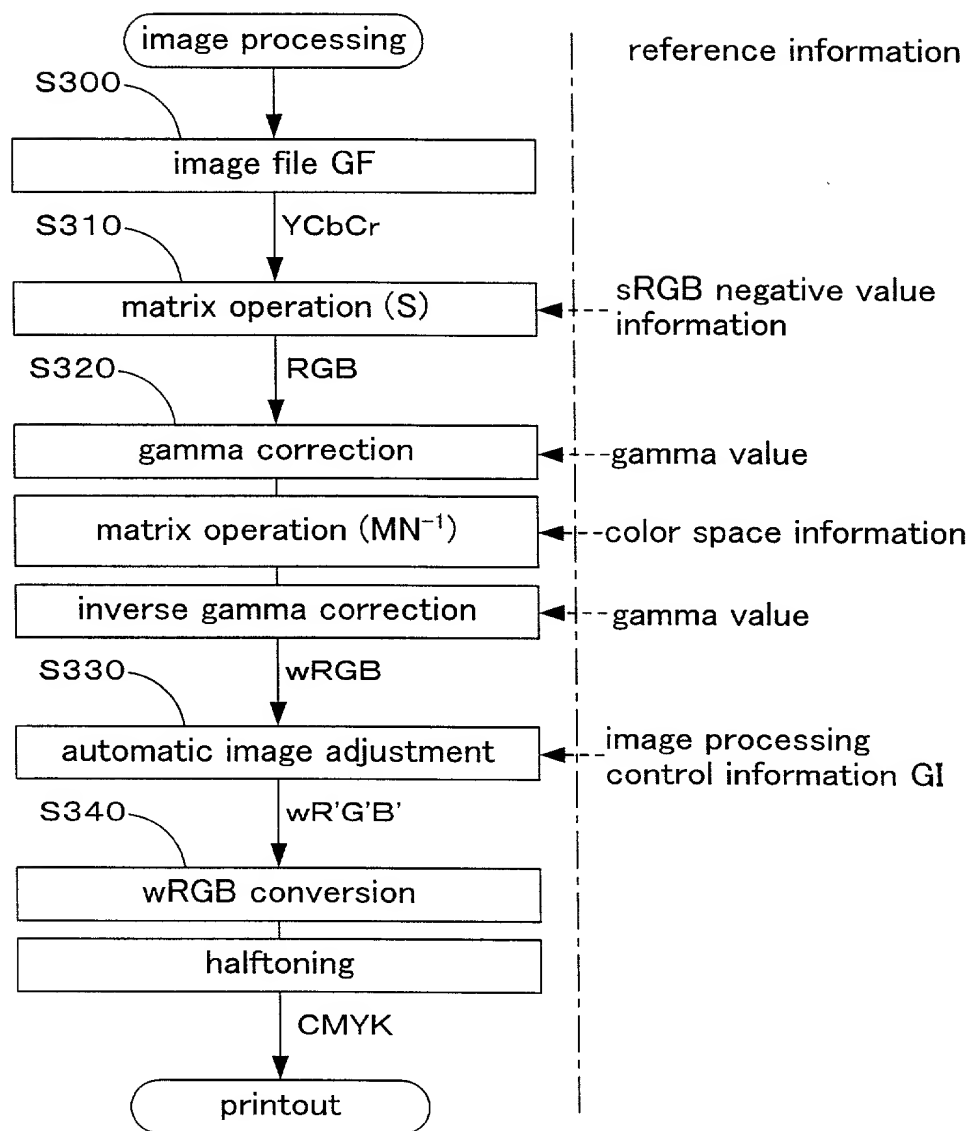


Fig. 10

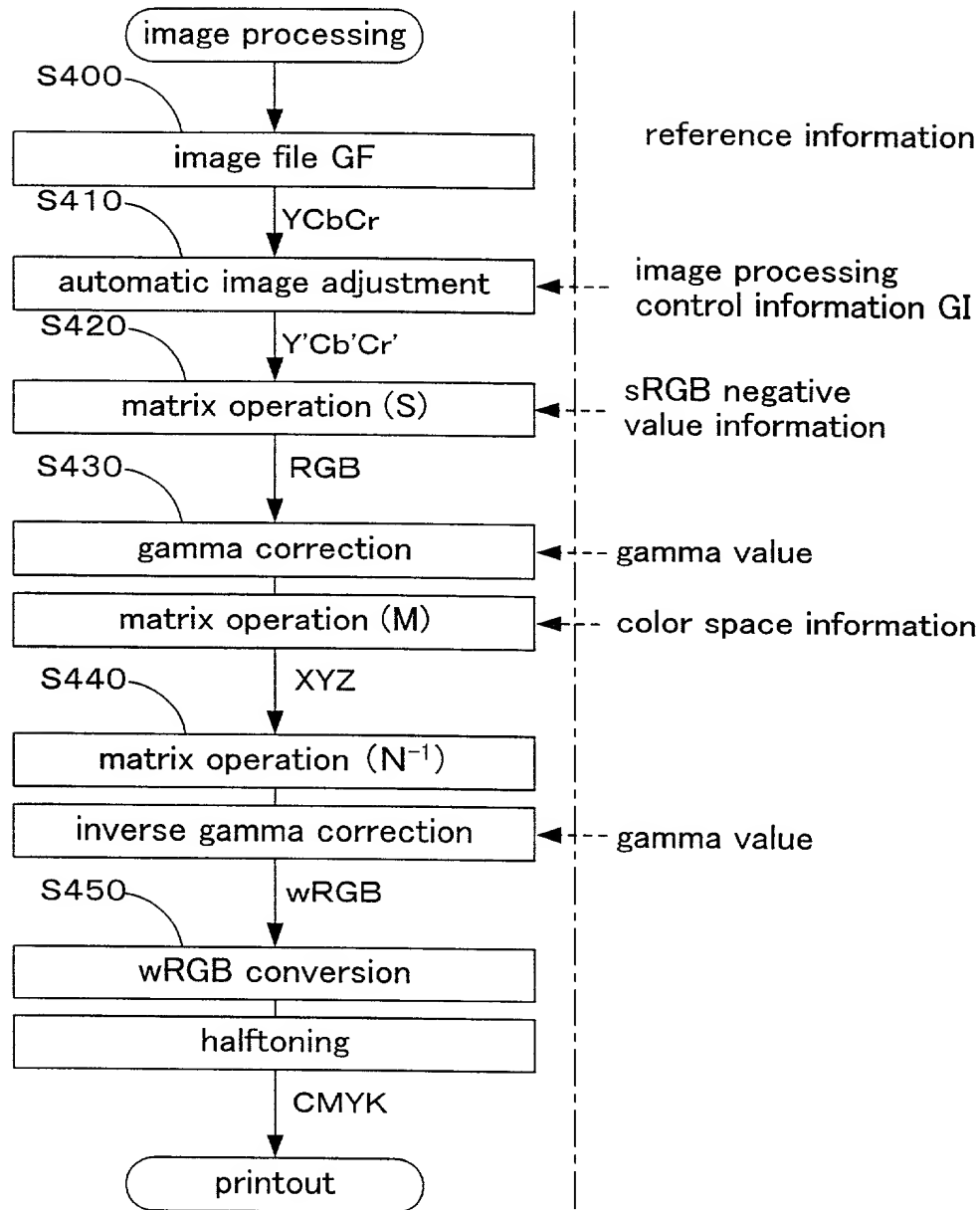


Figure 11

$$\begin{pmatrix} R \\ G \\ B \end{pmatrix} = S \begin{pmatrix} Y \\ Cb-128 \\ Cr-128 \end{pmatrix}$$

$$S = \begin{pmatrix} 1 & 0 & 1.40200 \\ 1 & -0.34414 & -0.71414 \\ 1 & 1.77200 & 0 \end{pmatrix}$$

Figure 12

$$\begin{pmatrix} X \\ Y \\ Z \end{pmatrix} = M \begin{pmatrix} Rt' \\ Gt' \\ Bt' \end{pmatrix} \quad M = \begin{pmatrix} 0.6067 & 0.1736 & 0.2001 \\ 0.2988 & 0.5868 & 0.1144 \\ 0 & 0.0661 & 1.1150 \end{pmatrix}$$

$$Rt, Gt, Bt \geq 0$$

$$Rt' = \left(\frac{Rt}{255} \right)^{\gamma} \quad Gt' = \left(\frac{Gt}{255} \right)^{\gamma} \quad Bt' = \left(\frac{Bt}{255} \right)^{\gamma}$$

$$Rt, Gt, Bt < 0$$

$$Rt' = -\left(\frac{-Rt}{255} \right)^{\gamma} \quad Gt' = -\left(\frac{-Gt}{255} \right)^{\gamma} \quad Bt' = -\left(\frac{-Bt}{255} \right)^{\gamma}$$

Figure 13

$$\begin{pmatrix} Re \\ Ge \\ Be \end{pmatrix} = N^{-1} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$$

$$N^{-1} = \begin{pmatrix} 3.30572 & -1.77561 & 0.73649 \\ -1.04911 & 2.1694 & -1.4797 \\ 0.0658289 & -0.241078 & 1.24898 \end{pmatrix}$$

$$Re' = \left(\frac{Re}{255} \right)^{1/\gamma} \quad Ge' = \left(\frac{Ge}{255} \right)^{1/\gamma} \quad Be' = \left(\frac{Be}{255} \right)^{1/\gamma}$$